## **REMARKS**

This is in response to the final Office Action mailed May 2, 2007. In the Office Action, the Examiner notes that claims 8-21 are pending and rejected. The Applicants herein amend independent claims 8 and 16. Support for the limitations may be found in the Applicants' specification on at least page 9, line 25 – page 10, line 5.

In view of the following discussion and above amendments, Applicants submit that none of the claims now pending in the application are indefinite or obvious under the provisions of 35 U.S.C. §103. Thus, Applicants believe that all of these claims are now in allowable form.

It is to be understood that Applicants do not acquiesce to the Examiner's characterizations of the art of record or to Applicants' subject matter recited in the pending claims. Further, Applicants are not acquiescing to the Examiner's statements as to the applicability of the art of record to the pending claims by filing the instant response including amendments.

## REJECTION OF CLAIMS 8-21 UNDER 35 U.S.C. §103

The Examiner has rejected claims 8-21 under 35 U.S.C. §103(a) as being unpatentable over Day et al. (U.S. Pat. 5,996,015, hereinafter "Day") in view of DeMoney (U.S. Patent 6,065,050, hereinafter "DeMoney") and Katinsky et al. (U.S. Pat. 6,452,609, hereinafter "Katinsky"). Applicants respectfully disagree.

Applicants respectfully submit that the combination of Day, DeMoney and Katinsky, alone or in any permissible combination, fail to teach or to suggest the limitations of Applicants independent claims <u>as a whole</u>. Applicants' independent claim 8 positively recites:

8. In an information distribution system including provider equipment and subscriber equipment, said provider equipment communicating to said subscriber equipment information streams including content requested by said subscriber equipment, an apparatus comprising:

a session manager, for interacting with said subscriber equipment and maintaining a plurality of playlists, wherein each playlist is associated with a respective subscriber, said playlist defining a plurality of content streams to be provided to said subscriber equipment, said playlist further identifying reverse and fast-forward streams associated with each one of said plurality of content streams, each content stream comprising a plurality of splicing entry and exit points dispersed therein to enable transitioning between said plurality of content streams, wherein said splicing entry and exit points are identified within transport packet headers of each one of said plurality of content streams;

a server, for storing content streams; and

a server controller for retrieving from said server, content streams defined by said playlist, said content streams being sequentially provided to said subscriber equipment; and

said session manager modifying said playlist in response to playlist modification commands received from said subscriber equipment, wherein a next stream in said playlist is spliced at an entry point associated with an exit point of a current stream being sent to said subscriber equipment. (Emphasis added.)

Applicants' independent claim 16 recites similar limitations. In an exemplary embodiment, Applicants' invention ensures smooth transitions between content streams, all content assets, such as video, audio and other information subject to inclusion in the playlist. (See Applicants' specification, p. 10, II. 16-31.) To accomplish this, all content is constructed in a manner facilitating inter-asset transition using, for example, splicing standards adopted by the Society of Moving Pictures Television Engineers (SMPTE). (See Applicants' specification, p. 9, I. 25 – p. 10, I. 5) Notably, the slicing points are identified at the packet level within the transport packet headers of the content stream. (See *Id.*)

Applicants respectfully submit that the combination of Day, DeMoney and Katinsky, alone or in any permissible combination, fails to teach or suggest at least the limitation of each content stream comprising a plurality of splicing entry and exit points dispersed therein to enable transitioning between said plurality of content streams, wherein said splicing entry and exit points are identified within transport packet headers of each one of said plurality of content streams.

Day only teaches concatenating entire video segments one after another to provide seamless video to a viewer. (See Day, col. 6, Il. 26-64.) Day fails to teach or suggest at least the limitation of <u>each content stream comprising a plurality of splicing entry and exit points dispersed therein to enable transitioning between said plurality of content streams, wherein said splicing entry and exit points are identified within transport packet headers of each one of said plurality of content streams, as positively</u>

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claimed by Applicants' invention.

Moreover, DeMoney fails to bridge the substantial gap left by Day. DeMoney only teaches creating an index look up table for the normal play multimedia stream associated with normal play, fast forward and fast reverse streams of the normal play multimedia stream. (See DeMoney, col. 9, II. 13-29.) Applicants respectfully submit that <u>indexing</u> is not the same as the <u>splicing</u> taught by Applicants' invention. For example, splicing does not require the use of an index table, as taught by DeMoney. Consequently, Applicants' invention does not require the additional processing required to compare index points of a multimedia stream and an index look up table, as taught by DeMoney.

However, the Examiner asserts in the Advisory Action dated July 9, 2007 (hereinafter "Advisory Action") that the use of intra frames (I-frames) used by DeMoney and Day reads on the limitation of splicing points taught by the Applicants' invention. The Applicants respectfully submit that splicing points taught by the Applicants' invention and I-frames used by DeMoney and Day are not the same. To clarify, the Applicants' amended independent claims 8 and 16.

Notably, the splicing points taught by the Applicants' invention <u>are identified</u> within transport packet headers of each one of said content streams in accordance with SMPTE splicing syntax. (See e.g., Applicants' specification, p. 9, I. 25 – p. 10, I. 5.) Consequently, the Applicants' invention provides a way to insert many potential splicing entry and exit points to reduce latency within the packets that are being transported within a given bandwidth.

In contrast, the I-frames used by DeMoney and Day are a specific type of frame used in MPEG encoding. Notably, I-frames are generally very large files that are minimally compressed and, thus, require a large amount of bandwidth to transport. (See DeMoney, col. 2, II. 33-35.) Consequently, using many I-frames to increase the entry and exit points of an MPEG video stream is not practical because of the amount of bandwidth it would consume. However, the splicing points taught by the Applicants' invention are identified within transport packet headers of each one of said content streams and, thereby, avoid this problem associated with I-frames.

Moreover, Applicants respectfully submit that Day and DeMoney cannot be meaningfully combined. Day teaches a method that concatenates entire video segments. In stark contrast, DeMoney teaches indexing within a multimedia stream to create index look up tables. Applicants respectfully submit that Day and DeMoney teach away from one another and cannot be meaningfully combined. There is simply no suggestion within Day to modify the teachings of Day with the multimedia stream indexing taught by DeMoney.

As previously argued, Day teaches the controller of the system coordinates the various functions of the system, including VCR like commands. (See Day, col. 3, I. 47 - col. 4, I. 7.) The control server controls the number of multi-media or audio/video data streams. (See *Id.*) Specifically, the control server provides a plurality of multimedia file data stream control functions including the functions of "play", "stop", "pause", "rewind", "forward" and "seek". (See *Id.*)

As noted by the Examiner and taught by Day, Day teaches that a play list is played by concatenating streams one after the other. (See Day, col. 6, II. 26-64.) Therefore, the Applicants respectfully submit that it is reasonable to interpret Day such that if trick play streams are used by Day, then the trick play streams would be played in a similar manner (i.e concatenating the trick play streams one after another). Therefore, Day and DeMoney teach two different methods of combining video streams that cannot be meaningfully combined.

Moreover, even if Day does not teach using trick play streams, the alternative would be to simply increase or decrease the rate of transmission of the content stream to fast forward or rewind, as also noted by the Examiner. (See Advisory Action, p. 4, II. 7-9.) Consequently, this would still teach away from the method requiring indexing taught by DeMoney. In either case, Day and DeMoney teach two <u>different</u> methods of combining video streams that cannot be meaningfully combined. Therefore, Day and DeMoney teach away from one another.

Finally, Katinsky also fails to bridge the substantial gap left by Day and DeMoney. Katinsky also fails to teach or suggest at least the limitation of <u>each content</u> stream comprising a plurality of splicing entry and exit points dispersed therein to

enable transitioning between said plurality of content streams, wherein said splicing entry and exit points are identified within transport packet headers of each one of said plurality of content streams. Katinsky only teaches a user friendly media player at the user terminal using "pageless" internet site where media streams are delivered to the user without the user having to navigate to different pages. (See Katinsky, Abstract.) Thus, Day, DeMoney and Katinsky, singly or in combination, do not disclose at least each content stream comprising a plurality of splicing entry and exit points dispersed therein to enable transitioning between said plurality of content streams, wherein said splicing entry and exit points are identified within transport packet headers of each one of said plurality of content streams.

For at least the above reasons, Applicants submit that independent claims 8 and 16 are not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Furthermore, claims 9-15 and 17-21 depend, either directly or indirectly, from independent claims 8 and 16 and recite additional features thereof. As such, and at least for the same reasons as discussed above, Applicants submit that these dependent claims also fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, Applicants respectfully request that the rejections be withdrawn.

## CONCLUSION

Thus, Applicants submit that claims 8-21 are in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Eamon J. Wall or Jimmy Kim at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

Dated: <u>7/3//67</u>

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